

- R E M A R K S -

The claim rejections indicated in the Examiner's action are as follows:

Claims	§112(2)	§102(e)	§103(a)	Status/References
1-12		X		Anticipated by Ebersole et al. (US Patent No. 6,500,008)

Claims 1 to 12 are currently in the application.

Claim 1 is for a method for generating a sequence of object definition data sets for a video particle explosion effect comprising: providing a graphics image data file of a particle pattern defining a shape of a plurality of particles; generating a sequence of object definition data sets using the graphics image data file; wherein the object definition data sets can be used to render a particle explosion effect on a video file. The graphics image data file is an image of the particle pattern to be applied to the video file. An example of such an image is found in FIG. 3A. The shape of each particle is clearly graphically represented. An example of the sequence of object definition data sets is shown in FIG. 5 as Alpha Arg 1 bearing numeral 71.

Preferably, as claimed in claims 2 and 3, the graphics image data file as a plurality of channels. As shown in FIG. 2A to FIG. 2D, each channel can comprise different graphical information for the particle pattern. This graphical information can also include, as claimed in claim 4, explosion sequence information, spin parameter information and softness of edges information.

Amended claim 11 is for a method for rendering a video particle explosion effect on a video source data file. It comprises the same steps as claim 1 with the additional steps of providing a video source data file and rendering the video particle explosion effect using the object definition data sets and the video source data file. As is shown at numeral 81 of FIG. 5, the video file itself is exploded into particles, whose shape is defined in the graphics image data file, once the effect is rendered.

Ebersole et al. (US Patent No. 6,500,008, hereinafter referred to as "Ebersole") discloses a method and apparatus for an augmented reality-based firefighter training system. The system includes hardware for motion tracking, display, and vari-nozzle instrumentation. The system software includes a real-time fire model, a layered smoke obscuration model, simulation of an extinguishing agent, and an interface to a zone fire model. Physical modeling and graphical elements in the software combine to create realistic-looking fire, smoke, and extinguishing graphics. Therefore, Ebersole describes a system for creating a video source data file in which the fires and explosions are realistic. Ebersole is for a technique for creating a video source data file and not for a method of rendering an effect on the video file to make the video file explode into particles. It is a video creation method and not an effect creation method on a video file.

Ebersole's purpose and the problem solved by Ebersole are completely different than those of Applicants' invention and the two inventions cannot be considered to be in the same art. The person skilled in the art of creating video files with realistic cartoon figures and actions such as fires and explosion (i.e. a game designer who animates a firefighter near a realistic fire) is not a person skilled in the art of making a 3-D video effect such as exploding a video file into a plurality of particles. Indeed, the game designer does not want the video file he is working on to explode on screen or be subjected to another 3-D effect because he wants the player to be able to see the video being played and the realistic graphics being used.

Consequently, Applicants believe that the rejection of claims 1-12 under 35 USC §102(e) using Ebersole is inappropriate.

Furthermore, Ebersole fails to teach the graphics image data file. Applicants submit that what the Examiner has used from Ebersole to reject the phrase "providing a graphics image data file" of Applicants' claim 1, namely "Appendix A", is not a teaching of a graphics image data file. Indeed, as stated at col. 10, lines 40-46, Appendix A "contains settings for the parameters of particle systems used in the invention. These parameters are meant to be guidelines that give realistic behavior for the particles. Many of the parameters are changed within the program, but the preferred starting parameters for

flames, smoke, steam, and water are listed in the appendix." Appendix A is a list of numerical parameters used to draw and animate a realistic fire, smoke, steam and water stream objects with flying particles in a video file. This technique (illustrating and animating fire, smoke, etc.) is found in the Microsoft Direct X documentation which explains how to draw and animate a particle effect for fire, smoke, etc.

Appendix A is not a graphics image data file which defines at least the shape of the particles of a video file to be exploded.

The graphics image data file is found in all pending claims. Ebersole clearly fails to teach and suggest the graphics image data file of Applicants' claims 1 and 11. Claims 1 to 12 are clearly not anticipated or obvious in view of Ebersole. The rejection of claims 1-12 under 35 USC §102(e) is believed to have been overcome by the above arguments.

For completeness of the argumentation, Applicants submit the following comments as to the rejection of claims 2-10 and 12.

As to claims 2, 3, 4 and 8, Ebersole uses a ARGB file. For Ebersole, the A channel is used to store alpha data, the R channel, the Red component, the G channel, the Green component and the B channel, the Blue Component. In Applicant's invention, the A channel is preferably used to store softness data, the R channel for the shapes of the particles used to explode the video file, the G channel for the sequence and the B channel for the spin.

As to claim 5, Ebersole does not mention a shattered glass pattern. The Examiner's refereral to FIG. 4 is erroneous since FIG. 4a shows that "water particles are then constrained to emit in a ring pattern from the nozzle location". This Figure has nothing to do with a shattered glass pattern for a video file.

As to claims 6-8, generating the graphic image data file is complex since the shape of the particles is drawn and information is preferably stored in each channel of the graphics image data file. It is not a standard ARGB file that can be generated with any

drawing software. The particle pattern designer must access draw the graphics image data file with knowledge of the effect of storing information in each channel.

As to claims 9 and 10, Ebersole does not extract their triangles information from a graphics image data file. Their triangles are built independently. Applicants' invention can construct the triangles in order to follow the edges of each particle. For Ebersole, only 2 triangles are used even if the shape does not fill the entire 2 triangles. This would imply a significant performance drop for Applicants' particle effect.

As to claim 12, Ebersole uses his invention to create a video file. Applicants' invention uses the video file as the source of the explosion. The video is exploding into a plurality of particles.

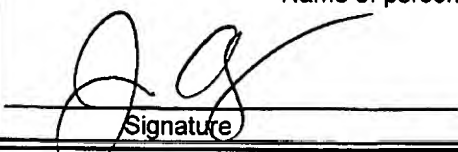
In view of the foregoing, reconsideration of the rejection of claims 1-12 is respectfully requested. It is believed that claims 1-12 are allowable over the prior art, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,
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